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A Man-o'-War Bird in Flight.

FOLLOWING AUDUBON AMONG THE FLORIDA KEYS*

By HERBERT K. JOB

PHOTOGRAPHS BY THE AUTHOR

ROM off Miami, out beyond Key West, nearly two hundred miles, extend a series of submerged coral reefs which form a breakwater for a parallel chain of long narrow islands of rough coral rock formation, densely overgrown with trees and jungle. Inside these islands are great shallow bays with immense flats of white clay mud, containing hundreds of low islands. These last are not of coral, but are groves of red mangrove trees growing out of the mud in shallow water, around whose roots the soil has gradually lodged by the action of the tides. The seedling mangrove drops off from the pa-

in a few years, another key is formed.

* This is the first of a series of rather remarkable photographs made by Mr. Job on a special exploration trip to Florida for Outing; others will follow on birds of prey—shore birds, for which Mr. Job is gathering material for this magazine.

In Audubon's time this great inaccessible wilderness was the resort of pirates and wreckers. Even now, so shallow and difficult of navigation is it, a sail is a rare sight upon its waters. Few naturalists have penetrated its inner shallows, and many of the keys are still nameless. Even indefatigable Audubon only entered the portals of Florida Bay, never reaching Barnes' Sound. Naturally, then, our little party of three on the 7-ton schooner, Maggie Valdez, was that night an enthu-

rent tree, and is borne by the current until

it grounds on a mud flat and takes root.

Here it spreads out by sending down new

roots from the branches—like the banvan tree of the Orient-then drops off seed-

lings, which take root around it, and thus,

siastic one on the borders of this land of promise, harassed though they were by mosquitoes and by troops of horrible-looking cockroaches, each two inches long—with which boats in this region are infested, as well as with scorpions.

Early the next morning we sailed out through the coral reef into the open sea to cruise outside the keys further westward, since the Maggie, drawing four feet of water, was too deep for the flats of Card's and Barnes' Sounds. The ever-wonderful migration of the birds was now at its height, and thousands of little land-birds were making their long, wearv flight from the West Indies, or even farther, across the sea to our shores. Even with Florida in sight, those last two miles often proved heart-breaking. The tired little creatures often would alight on our spars, or even on deck, sometimes allowing us to take them in our hands. One such was a male bobolink, in a curious mottled transition stage of plumage. Another male bobolink tried to alight on the end of the boom, but was too much exhausted to gain a footing, and fell into the water, where he lay struggling pitifully, unable to rise. Thus, undoubtedly, do multitudes of the little migrants perish. Besides this kind we also identified water-thrushes, redstarts, and black-poll warblers.

Toward evening we ran in to anchor under the lee of Indian Key, where Audubon, in 1832, began his famous entrance into Florida Bay, coming there on the U. S. revenue cutter *Marion*. Here he was entertained by a resident customs collector, and with him made boating-trips among the keys. It was with absorbing interest that I gazed upon and explored this beautiful tropical islet. Though I could not trace the great naturalist's literal footsteps upon the littoral stretch of hard coral rock, I could recall his words of admiration at the beautiful little birds he saw flitting among the bushes—this very same time of year, it was-migrants that had happily escaped the dangers of the sea. And here, now, many warblers, thrushes, finches, doves, and the like, were happy among the luxuriant growth of cocoanut palms, century-plants, and the thorny thickets—in which last the mother grounddoves were brooding young in their frail nests—as the evening shadows fell. When the sun rose, they were all jubilant with

song. We drank milk from the green cocoanuts, rambled about and took photographs, and talked with the old man, who, with his wife, represented the human population. The old fellow had never heard of Audubon, and cared more for the boat he was building than for antiquities. This island was the scene of an Indian massacre in the Seminole War, and later was occupied by an enterprising rascal who ran a drinking and gambling dive, which was resorted to by smugglers and outlaws. Shades of Audubon!

Audubon narrates that, immediately landing on Indian Key, he was conducted by his host across to a neighboring key, where he and his party inspected a rookery of Florida cormorants. From his account I should judge that this was Lower Metacombe Key, which we could see about a mile to the westward, a long, dark strip of mangroves some four miles long. We did not visit it, as the guide said that the cormorants did not resort there, but frequented some smaller islands further in the bay. So, hoping to happen upon the route of Audubon's second-day excursion, which he made between 3 A.M. and dusk, to a key evidently some miles away, where he found the man-o'-war birds resorting and beginning to nest, we got under way about 8 A.M. Our course lay between Lower Metacombe and Lignum Vitæ Keys, and on into the mazes of "soapy mud-flats," or "soap-flats," as Audubon called them. The simile is an apt one, for the sticky, whitish clay mud has a very soapy appearance, and the tide running over the flats stirs up a whitish lather suggestive of soapy dish-water.

Approaching some small flats marked on the chart as the "Boot-leg Keys," six or eight miles north of Indian Key, the schooner stuck hard and remained fast for the day. But it proved an interesting day, for noticing near-by keys we set forth with camera and note book, and rowed the tender as far as we could, dragging it the rest of the way over the slippery white "soap," in which we sank half way to the knees. On the first island there were some twenty pairs of Louisiana herons nesting, and one pair of the red-bellied woodpecker. As we neared the second island I waded on ahead, camera in hand, ready for a snapshot when the birds rose, and when I appeared around the end of the island great



"Spent their time making vicious lunges at me."



Young Great White Herons-"These were of the sulky sort,"



was the commotion among its inhabitants. A confused mass of wings were seen and heard beating the tree-tops and the air as two or three hundred birds rose—the brown pelicans, cormorants, and man-o'-war birds. The first two flew directly away, the latter separated from the others, and, in a flock, soared higher and higher overhead, giving me time for two more pictures.

Eager to see the nests, we forced our way through the tangle of mangrove roots and branches. Everything was as filthy as should be in a great nesting-place, but great was our surprise and disappointment to find that there were no nests. It was merely a roost, but one constantly resorted The birds, though now dispersed, returned that evening in much larger numbers, and when we sailed by here later on the trip, one night at dusk, there were hundreds of them, both in the trees and hovering, mostly man-o'-war birds. since he had known the region, the guide said, this had been their principal place of resort in that vicinity. Inasmuch as water-birds are very tenacious of their resorts when not too much persecuted, it is very probable that this was the rookery which Audubon visited on his second day's excursion.

It was not before sundown that we succeeded in warping the schooner out of her sticky resting place. We sailed on, dodging shoals, or scraping over them, until about nine o'clock, when, in the dark, we ran aground once more, but got free, and anchored for the night. At daybreak we started on, and that day managed to keep The wind was light, and we worked leisurely along, seeing a big turtle, now and then, floating on the surface, and an occasional sea-bird—pelicans, laughing gulls, a very few terns, and once a parasitic jaeger. In the afternoon we passed Sandy Key, the farthest point that Audubon reached. A few splendid great white heron—the largest heron of North America, snow-white, which Audubon discovered on these keys, and named—were perched appropriately on the trees. As the guide was in a hurry to get home, we postponed our landing here and kept on toward a spot on the now visible mainland, about ten miles east of Cape Sable.

Here we remained for a week, making trips into the interior and to neighboring keys. Some of these keys, owing to the shallowness of the water, we could best reach in small boats. One day, approaching a small key, I saw several great white herons—splendid birds, nearly as tall as a man—flying uneasily about, well over the tops of the trees. On landing and clambering about for some time amid mangrove roots and slippery, sticky mud, never ceasing, withal, to fight mosquitoes, I was finally rewarded by finding several of their nests, built in crotches, twenty to thirty-five feet above the ground, bulky, saucer-shaped platforms of good-sized sticks. Each of them, of course, was profusely whitewashed, as were the surroundings, and contained two or three snowy white young, in various stages, from callow nestlings to those nearly matured and almost able to fly.

One nest especially interested me. It was conveniently situated, about thirty feet from the ground, and was occupied by an imposing young heron of almost full size, which stood on the nest and received me in dignified manner, not scrambling or fluttering out, as young herons are all too apt to do. While I admired him and screwed my camera to a branch, he never moved, nor did he at the critical moments of exposure. Then, as I would stir him up a bit, he retreated out beyond the nest, where he stood like an obelisk, showing his good breeding in every inch of his stature, as I again took his picture.

Not so well bred were a trio of halfgrown scapegraces in a neighboring nest. These were of the sulky sort, that threw themselves prostrate in miserable attitudes, refusing to stand up and behave, despite of all that I—even assisted by my guide—could do. Another nest with two tiny fledglings also gave me trouble, from the difficult combination of wind, movement, and shadows. However, I conquered them, and then climbed to a rather lofty nest near by of the great blue heron, whose two youthful inmates spent their time in making vicious lunges at me, accompanied by the harshest expletives of the heron tongue. I did not catch sight of their parents, but now and then a vision of white, ghost-like, passed silently overhead, safely distant.

Having secured another (and nameless) vessel of lighter draught than the *Maggie*, we started off on a general exploration of



Young Great White Heron-The species Audubon discovered on the Florida keys.

the inaccessible shallows and keys of the inner bays. First, however, we sailed westward to Sandy Key, to examine this remote spot, six miles off Cape Sable, where Audubon passed the night under his mosquito net, and which he so vividly describes in one of his "episodes." With a good easterly wind, we were there by noon, and hastened to go ashore. The key is about a mile long, in two lobes, connected by a narrow grassy isthmus. The rest of it is mostly wooded. It is one of the few Florida keys that boast a genuine beach—of the regulation Cape Sable shell-sand.

When Audubon landed there seventy-two years ago he records that "our first fire among a crowd of the great godwits laid prostrate sixty-five of these birds. [This was before the days of "Audubon" societies!] Rose-colored curlews [roseate spoonbills] stalked gracefully beneath the

mangroves. Purple herons rose at almost every step we took, and each cactus supported the nest of a white ibis. The air was darkened by whistling wings, while on the waters floated gallinules and other interesting birds." Next morning, at low tide, he was amazed to see the flats covered with feeding birds in all directions. But now, as we reviewed these same scenes, traversed the long beach, searched the groves of red and black mangrove, examined the little interior pool and swamp, and the patches of cactus, we found a different state of things. Too convenient a landing place for the "conch" fishermen, there were no longer "acres" of ibis nests. We found these later, back from Cape Sable, on the

main, in the inaccessible swamps to which they have been driven. A few pairs of great white herons, probably nesting, flew out from the mangroves and alit on the flats, where there were also great blue and Louisiana herons feeding, as well as some laughing gulls, blackbreast plovers, and other shore birds. A lot of black-crowned night herons flew up from around the pond, and kept returning, as though they had nests somewhere about. Some brown pelicans, fish crows, and buzzards were flying around, and a pair of bald eagles, soaring conspicuously over the island, had their nest, a great pile of large sticks, six feet in height, about fifty feet up a giant black mangrove. On a number of other keys we afterward found similar eagles' nests. The young had long since flown.

As we walked along the beach, we noticed, a few yards out from shore, a

beautiful specimen of the Physalia, or "Portuguese man-o'-war," floating on the water, its transparent jelly-like form flashing in the sunlight, resplendent with blue, purple, and rosy hues. It had the curious habit of rolling completely over and righting itself again. It swam by means of tentacles that streamed down below, and was constantly accompanied by a pretty little fish, that we afterward saw dead, killed by the dangerous tentacles. One of our party laid hold of the creature, and began to drag it ashore, but he soon let go with an exclamation of pain. The captive had well used its means of defence. and for the next hour my friend was in torment, his arm being nearly paralyzed up to the shoulder, and aching severely.

He will be chary of these warriors hereafter.

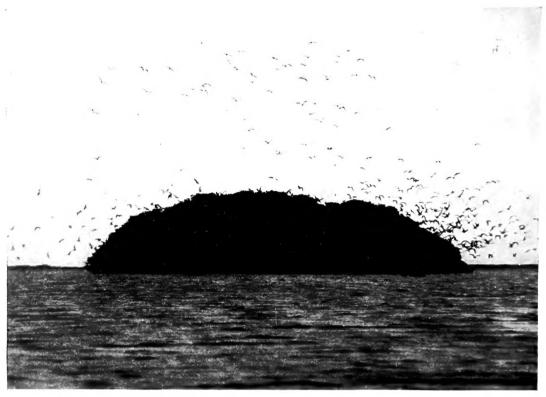
Sailing on again, this time south and east, late in the evening we approached Man-o'war Keys, two islands, one of them a mere "bush," or clump of mangroves, another reputed resort of the frigate or man-o'war birds. Early in the morning we rowed the remaining mile over the soap-flat, to find that there were very few "men-o'war," but plenty of Florida cormorants, which resorted to both the islands, though not to breed. They afforded me some flight-pictures, and some amusement, too, when, wading around a corner of the "man-o'-war bush," I came suddenly close upon a number of them on the trees of the submerged inlet. In

their terror many of them dropped like stones into the water, as though they had fainted, and were lost to sight; others, partially recovered, went fluttering along the surface. The only evidence of nesting was on the larger key, where there were a number of great blue herons and their empty nests, and another nest belonging to a pair of eagles.

From here we started on for a long hard beat to windward, still south-east, to reach a little settlement called Planter, on Key Largo, where there was a store—the only one in all the region—for provisions were running short. It took two days of hard work, even to getting overboard to push. The rough clearings on the key amid the outcropping coral rock certainly looked



"Stood like an obelisk."



"Now they begin to rise."

very unpromising for agriculture; but the profusion of all sorts of tropical fruits was convincing and delightful. Potatoes are dug, they say, with crow-bars instead of shovels.

Having now plenty of provisions, fruit galore, and a fine mess of craw-fish, we proceded to explore many of the inner keys. On most of them there were no resident water birds, save a few herons. On one large key, along the shores of two salt lakes in its interior, we found least terns, Wilson's plovers, and black-necked stilts, breeding, and a colony of laughing gulls about to do so. The migration of the shore-birds was interesting, and I found the best opportunities for photographing them that I had ever met.

Despite all our efforts thus far, we had not found the man-o'-war birds actually breeding. So one day we were more than glad to anchor near a small key to which the guide said thousands of these great birds constantly resorted. It was back under Key Largo, farther up the sound than we had yet been. We reached there just before sunset, and at once I started out in the tender, the other ornithologists deciding to wait till morning. As the

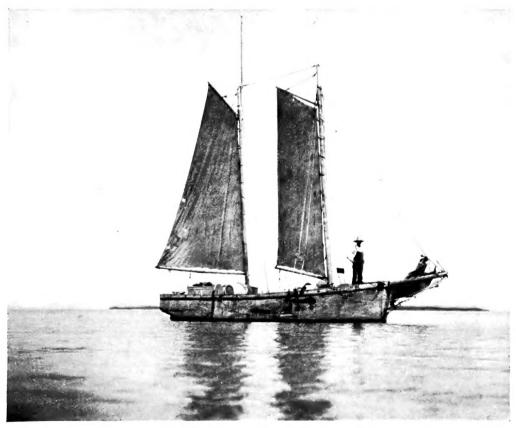
guide rowed me through a narrow passage in the mangroves, a break in a long peninsula, there lay before us the little round green islet. First of all some cormorants flew from a mangrove clump out in the water. Then, as we approached within long gunshot of the island, began a wonderful scene. A few man-o'-war birds had been visible, alighting on the trees, or flying , about; now they began to rise in scores, in hundreds, and then in thousands. When one realizes that these birds measure nearly seven feet in extent of wing, it will give a better idea of the imposing spectacle before us. The area of the island was hardly an acre, and it seemed incredible that so many of the great birds could have found footing in the trees, or that anything short of the toughness of the red mangrove wood could sustain them all. I secured a picture of them as they began to rise from the island, and then a number more as they soared overhead, fairly covering the sky. One only had to point a camera upward almost anywhere and snap to get a plate full of gracefully soaring birds. After a few moments the cloud gradually drifted away, to hover for hours over a distant key.

Then we hastened to the island. Several reddish egrets—the only ones met with on the trip--started out from the trees close beside us, as did some Louisiana herons. The island itself was entirely under water, and the trees were white with filth. But even here the elusive men-o'-war were not yet nesting. The Louisiana herons had eggs, and there were about a dozen rude, empty nests of sticks, lined with some frigate feathers, just like what these birds are said to build; yet they may have belonged to cormo-The man-o'-war bird is not now known to nest in Florida, and we had hoped to be able to re-discover this fact. to which Audubon was witness. Since these birds are said by the guide—a careful and accurate observer—to remain here in immense numbers throughout the entire year, and as they are known to breed very late, I am confident that a visit to some of these roosts in June or July would find the host settled down to family cares —and what a sight it would be!

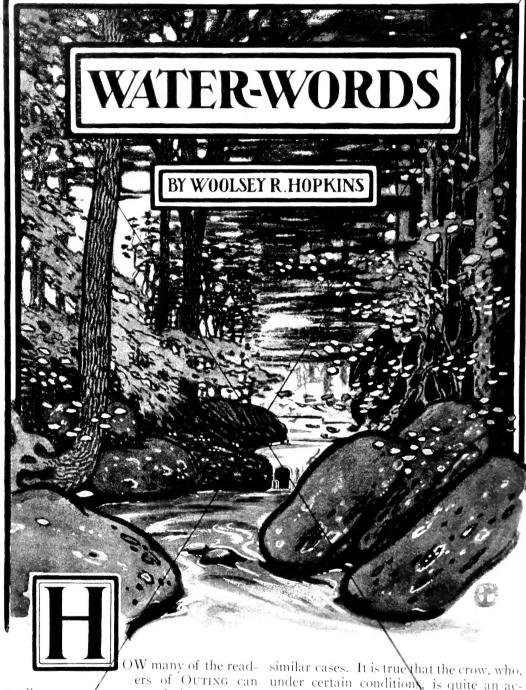
On the way back to the vessel, a pair of the exquisite pink roseate spoonbills flew close over our heads, giving me a splendid and memorable view of their glories. Alas for the delaying naturalists! The birds did not return that night to the roost, and next morning a single straggler mocked the camera of the delinquents.

All along on the cruise we had watched longingly and carefully for a sight of the great rosy flamingoes feeding on the muddats. That pleasure was not for us. Small bands of the wary creatures are yet seen in this region, mostly in fall and winter. Our guide saw the last bunch in early April, before we arrived.

Audubon, describing his cruise among the keys at this same season of the year, speaks of the intense heat and of the necessity of a fish and cracker diet. Our experience was that the temperature was very equable, with fine cool nights, ideal weather for living and sleeping outdoors—very different from the heat of the interior of Florida. We enjoyed a hearty and varied fare without any ill effect. Indeed, it would be hard to recall a more enjoyable outing in all my experience than following the great pioneer of American ornithology among the keys of Florida.



The Schooner Maggie Valdez.



spell or pronounce any of those natural sounds, the words of bird and beast, which we so constantly hear all about us? To many creatures names have been given by man, which attempt to imitate the sounds made by those creatures. Such a nomenclature is rarely satisfactory to one who listens closely to the natural sound. We call a certain bird Phoebe, but the bird says no such word. So with the cuckoo, at least perior and evil intelligence which it is just

under certain condition, is quite an accomplished linguist, does sometimes say "caw" quite distinctly. Ne also utters many other sounds. For fourteen years, now, I have known a crow who occupies an influential position among his fellows, and is much respected and feared by them, who says "oar" as distinctly as any waterman. But the crow is only half bird, at best, the other half being some kind of uwith the American bird, and so in almost all as well not to offend; so I always saw Gaylord Bros. Makers Syracuse, N. Y. PAT, JAN, 21, 1908

